

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 42. (Canceled).

43. (New) A linear motor, comprising:

at least one primary component having field-generation coils arranged as one of (a) concentrated and (b) overlapping windings lined up next to each other along a predefined path;

at least one secondary component supplied via an energy and information data transmission interface, the secondary component including at least one permanent magnet and a signal processor device including one of a progressive movement and movement controller adapted to generate at least one setpoint with respect to a coil controller, the setpoint supplied by a setpoint interface as a variable for commutation by the secondary component of the coil controller, stationary relative to the primary component; and

a device adapted to rigidly support the secondary component and guide the secondary component along the predefined path.

44. (New) The linear motor according to claim 43, wherein the linear motor is adapted for a modular conveyor system including straight and curved path sections that form a path.

45. (New) The linear motor according to claim 43, wherein the secondary component received movement-state information by at least one sensor interface from a movement-state sensor mounted in a region of the primary component.

46. (New) The linear motor according to claim 45, wherein the movement-state information includes information corresponding to at least one of (a) speed, (b) acceleration, (c) relative position, (d) absolute position and (e) shear force.

47. (New) The linear motor according to claim 45, wherein the secondary component received movement setpoints, from at least one control device via at least one control interface mounted in a region of the primary component.

48. (New) The linear motor according to claim 47, wherein the movement setpoints correspond to at least one of (a) speed, (b) acceleration, (c) relative position, (d) absolute position and (e) shear force.

49. (New) The linear motor according to claim 47, wherein at least one control device is arranged in a decentralized manner and includes control modules arranged in a region of the primary component.

50. (New) The linear motor according to claim 47, wherein the control device administers specific features of at least one secondary component for the control thereof and transmits and receives then via a control interface.

51. (New) The linear motor according to claim 50, wherein the specific features include identifying features.

52.. (New) The linear motor according to claim 50, wherein the signal processor device administers specific features of the secondary component for the control thereof and transmits and receives them via a control interface.

53. (New) The linear motor according to claim 52, wherein the specific features include identifying features.

54. (New) The linear motor according to claim 51, wherein at least one identifying feature includes a unique address that addresses at least one secondary component.

55. (New) The linear motor according to claim 43, wherein at least one of (a) a control interface, (b) a sensor interface, and (c) the setpoint interface is non-contacting.

56. (New) The linear motor according to claim 55, wherein at least one of the interfaces is arranged as an infrared interface.

57. (New) The linear motor according to claim 56, wherein a sensor system is shielded from an environment in a fluid-tight manner by a transparent seal.

58. (New) The linear motor according to claim 55, wherein at least one interface is arranged as an inductive interface.

59. (New) The linear motor according to claim 55, wherein at least one interface is arranged as a radio interface.

60. (New) The linear motor according to claim 45, wherein at least two interfaces are combined to form at least one uniform interface.

61. (New) The linear motor according to claim 43, wherein the setpoint generated by the signal processor device belongs to a single setpoint category.

62. (New) The linear motor according to claim 61, wherein the setpoint generated by the signal processor device includes at least one of (a) a position setpoint, (b) a speed setpoint, (c) an acceleration setpoint, (d) a current setpoint, and (e) a voltage setpoint.

63. (New) The linear motor according to claim 61, wherein the setpoint generated by the signal processor device includes at least two of (a) a position setpoint, (b) a speed setpoint, (c) an acceleration setpoint, (d) a current setpoint, and (e) a voltage setpoint.

64. (New) The linear motor according to claim 43, wherein an energy supply of the signal processor device is provided by a single type of energy source.

65. (New) The linear motor according to claim 64, wherein the energy supply includes an energy source affixed on the secondary component.

66. (New) The linear motor according to claim 65, wherein the energy source includes at least one of (a) a chargeable accumulator, (b) a non-chargeable battery and (c) a solar cell system.

67. (New) The linear motor according to claim 65, wherein the energy supply includes an inductive energy interface arranged to up electrical energy in a non-contacting manner via at least one coil which is stationary relative to the primary component.

68. (New) The linear motor according to claim 67, wherein the inductive energy interface includes an induction coil.

69. (New) The linear motor according to claim 64, wherein a pick-up mounted on the secondary component and in contact with the primary component conveys the energy to the signal processor device.

70. (New) The linear motor according to claim 64, wherein a pick-up mounted on the secondary component and in contact with the primary component conveys the energy to the signal processor device via one of (a) a sliding contact and (b) a roller contact.

71. (New) The linear motor according to claim 64, wherein the energy for the signal processor device is supplied by a cable connection.

72. (New) The linear motor according to claim 43, wherein an energy supply of the signal processor device is provided by a combination of different types of energy sources.

73. (New) The linear motor according to claim 43, wherein, for non-contacting transmission of at least one of (a) energy and (b) information data, communications devices of the secondary component and the primary component are arranged opposite one another during operation, at sides of the secondary component and the primary component facing one another.

74. (New) The linear motor according to claim 43, wherein individual coils on the primary component are arranged next to each other along the movement path of the secondary component, and the coil controller adapted to supply at least one individual coil with current.

75. (New) The linear motor according to claim 43, wherein the secondary component is moveably supported on the primary component by a rail having at least two tracks.

76. (New) The linear motor according to claim 43, wherein the secondary component includes at least three rollers, two rollers being assigned to a shared track and a third roller being assigned to an additional track.

77. (New) The linear motor according to claim 76, wherein the third roller is flexibly supported on the secondary component.

78. (New) The linear motor according to claim 43, wherein a control element arranged as half-bridge in each case is connected to an individual coil mounted on the primary component and feeds a coil current whose orientation and intensity are defined by a trigger signal as specified by the setpoint.

79. (New) The linear motor according to claim 78, wherein a number n of control elements arranged as half-bridges are connected to one of n individual coils mounted on the primary component.

80. (New) The linear motor according to claim 79, wherein a plurality of control elements arranged as half-bridges are connected to one of n individual coils mounted on the primary component in a redundant manner

81. (New) An industrial machine, comprising:
a linear motor including:

at least one primary component having field-generation coils
arranged as one of (a) concentrated and (b) overlapping windings lined
up next to each other along a predefined path;

at least one secondary component supplied via an energy and information data transmission interface, the secondary component including at least one permanent magnet and a signal processor device including one of a progressive movement and movement controller adapted to generate at least one setpoint with respect to a coil controller, the setpoint supplied by a setpoint interface as a variable for commutation by the secondary component of the coil controller, stationary relative to the primary component; and
a device adapted to rigidly support the secondary component and guide the secondary component along the predefined path.

82. (New) The machine according to claim 81, wherein the industrial machine is adapted for automated lanes, which include an industrial process including a linear movement.

83. (New) The machine according to claim 82, wherein the industrial process includes an industrial process for at least one of (a) flat stocks, (b) packaging and (c) tools.

84.. (New) The machine according to claim 81, wherein the machine includes a plurality of secondary components which execute a process-synchronous movement according to predefined process rules.

85. (New) The machine according to claim 84, wherein the machine includes at least five secondary components.

86.. (New) The machine according to claim 82, wherein the linear movement is predefined by a movement path that is formed by a plurality of primary components each having a predefined length in the manner of an assembly kit.

87. (New) The machine according to claim 86, wherein the movement path includes at least one of (a) straight and (b) curved primary components.

88. (New) The machine according to claim 84, wherein a higher-order process controller monitors and controls movement sequences.

89. (New) The machine according to claim 88, wherein the process controller prevents a collision of secondary components.

90. (New) The machine according to claim 88, wherein the process controller implements an initialization of all secondary components upon start-up.

91. (New) The machine according to claim 88, wherein the process controller monitors and controls the transition of the secondary components between two primary components to avoid transition interruptions and to ensure continuity in the position sensing.

92. (New) The machine according to claim 81, wherein the machine is adapted package goods.

93. (New) The machine according to claim 81, wherein the machine is adapted to package at least one of (a) particular food items and (b) luxury food stuffs.

94. (New) The machine according to claim 93, wherein components of the machine are at least one of (a) watertight and (b) splash-proof.

95. (New) The machine according to claim 81, wherein the machine is adapted to perform one of (a) a subfunction of a tool machine and (b) a function of an automated lane or conveyor lane.

96. (New) The machine according to claim 81, wherein the machine is arranged as a printing machine.

97. (New) The machine according to claim 81, wherein the machine is arranged as a sheet-metal processing machine.